

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

Claims 1 to 196 (canceled).

197. (currently amended) A method for reducing the level of active biological contaminants or pathogens in a solid tissue, said method comprising:

(i) adding to ~~said~~ the tissue at least ~~one~~ two stabilizers selected from the group consisting of ~~ascorbic acid, sodium ascorbate, mannitol, trehalose, and dimethylsulfoxide (DMSO); butylatedhydroxytoluene (BHT), dimethylthiourea, glutathione, lipoic acid, 6-hydroxy 2,5,7,8-tetramethylchroman 2-carboxylic acid (Trolox), uric acid, albumin, histidine, N-acetyl cysteine, tryptophan, N-acetyl tryptophan, methionine, cysteine, and N-tert-butyl-alpha-phenyl nitron,~~ wherein a proteinaceous material is not added to the tissue; and

(ii) irradiating ~~said~~ the tissue with a ~~suitable~~ dose of gamma radiation effective to reduce the level of active biological contaminants or pathogens in said tissue.

198. (previously presented) The method of Claim 197 wherein the solid tissue is hard tissue.

199. (currently amended) The method of Claim 198 wherein the hard tissue is selected from the group consisting of bone, demineralized bone matrix, joints, femurs, femoral heads and teeth.

200. (previously presented) The method of Claim 197 wherein the solid tissue is soft tissue.

201. (previously presented) The method of Claim 200 wherein the soft tissue is selected

from the group consisting of bone marrow, ligaments, tendons, nerves, skin grafts, heart valves, cartilage, corneas, arteries and veins.

202. (previously presented) The method of Claim 197, wherein the solid tissue is a combination of hard and soft tissue.

203. (previously presented) The method of Claim 197, wherein the solid tissue is at a temperature below its freezing point during irradiation.

204. (previously presented) The method of Claim 197, wherein the solid tissue is maintained in an inert atmosphere during irradiation.

205. (previously presented) The method of Claim 204, wherein the solid tissue is maintained under vacuum during irradiation.

206-221. (canceled)

222. (currently amended) The method according to Claim 197, ~~206 or 217~~, wherein ~~said~~ the irradiation is applied at a rate of at least about 3.0 kGy/hour to at least about 30.0 kGy/hour.

223. (currently amended) The method of Claim 197, ~~206 or 217~~, wherein the total dose of gamma irradiation is at least about 45 kGy.

224. (currently amended) The method of Claim 197, ~~206 or 217~~, wherein the concentration of the at least ~~one~~ two stabilizers is at least 20 mM.

225. (currently amended) The method of Claim 197, ~~206 or 217~~, wherein the concentration of the at least ~~one~~ two stabilizers is at least 50 mM.

226. (currently amended) The method of Claim 197, ~~206 or 217~~, wherein the concentration of the at least ~~one~~ two stabilizers is at least 100 mM.

227. (currently amended) The method of Claim 197, ~~206 or 217~~, wherein ~~the at least one~~ of the at least two stabilizers is DMSO.

228. (currently amended) The method of Claim 197, ~~206 or 217~~, wherein ~~the at least one~~ of the at least two stabilizers is mannitol.

229. (currently amended) The method of Claim 197, ~~206 or 217~~, wherein ~~the at least one~~ of the at least two stabilizers is trehalose.

230. (canceled)

231. (canceled)

232. (currently amended) The method of Claim ~~231~~ 197, where the two or more stabilizers are DMSO and mannitol.

233. (currently amended) The method of Claim 197, ~~206 or 217~~, further comprising contacting the tissue, ~~protein sample, plasma or serum~~ with one or more sensitizers.

234. (currently amended) The method of Claim 197 ~~or 206~~ wherein the tissue ~~or protein sample~~ contains one or more residual solvents.

235. (previously presented) The method of Claim 234 wherein the one or more residual solvents is water.

236. (previously presented) The method of Claim 234 wherein the one or more residual solvents is an organic solvent.

237. (previously presented) The method of Claim 236 wherein the organic solvent is selected from the group consisting of ethanol, isopropanol and polyethylene glycol.

238. (previously presented) The method of Claim 234 wherein the one or more residual solvents content is reduced by lyophilization.

239. (previously presented) The method of Claim 238 wherein the one or more residual solvents content is less than 8.0 percent.

240. (previously presented) The method of Claim 238 wherein the one or more residual solvents content is less than 6.0 percent.

241. (previously presented) The method of Claim 238 wherein the one or more residual solvents content is less than 1.0 percent.

242. (previously presented) The method of Claim 238 wherein the one or more residual solvents content is less than 0.5 percent.

243. (currently amended) The method of Claim 197, ~~206 or 217~~, wherein the tissue, ~~protein sample, plasma or serum~~ is irradiated for a sufficient amount of time to reduce the level of one or more biological contaminants in the tissue, ~~protein sample, plasma or serum~~.

244. (new) The method of Claim 202, wherein the soft tissue is selected from the group consisting of bone marrow, ligaments, tendons, nerves, skin grafts, heart valves, cartilage, corneas, arteries and veins.

245. (new) A method for reducing the level of active biological contaminants or pathogens in a solid tissue, said method comprising:

(i) adding to the tissue at least two stabilizers selected from the group consisting of mannitol, trehalose, and dimethylsulfoxide (DMSO), wherein a proteinaceous material is not added to the tissue; and

(ii) irradiating the tissue with a suitable dose of gamma radiation effective to reduce the level of active biological contaminants or pathogens in said tissue; and wherein the tissue is selected from the group consisting of bone marrow, ligaments, tendons, nerves, skin grafts, heart valves, cartilage, corneas, arteries and veins.

246. (new) A method for reducing the level of active biological contaminants or pathogens in a hard tissue, said method comprising:

(i) adding to the tissue at least two stabilizers selected from the group consisting of mannitol, trehalose, and dimethylsulfoxide (DMSO), wherein a proteinaceous material is not added to the tissue; and

(ii) irradiating the tissue with a suitable dose of gamma radiation effective to reduce the level of active biological contaminants or pathogens in said tissue.